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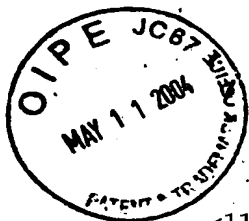
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279152RX
SEQUENCE LISTING

<110> ADLER, JON ELLIOT

<120> T2R TASTE RECEPTORS AND GENES ENCODING SAME

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<140> 09/825,882

<141> 2001-04-05

<150> 60/195,532

<151> 2000-04-07

<150> 60/247,014

<151> 2000-11-13

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 50 55 60
 Ser Arg Ile Ala Leu Gln Ser Leu Met Met Leu Glu Ile Thr Ile Ser
 65 70 75 80
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 Trp Leu Ser Phe Phe Tyr Phe Val Lys Ile Ala Asn Phe Ser Tyr Pro
 115 120 125
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 145 150 155 160
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 165 170 175
 Asn Ser Thr Lys Lys Thr Tyr Leu Ser Glu Ile Asn Val Val Gly Leu
 180 185 190
 Ala Phe Phe Phe Asn Leu Gly Ile Val Thr Pro Leu Ile Met Phe Ile
 195 200 205
 Leu Thr Ala Thr Leu Leu Ile Leu Ser Leu Lys Arg His Thr Leu His
 210 215 220

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Met Gly Ser Asn Ala Thr Gly Ser Asn Asp Pro Ser Met Glu Ala His
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Met Gly Ala Ile Lys Ala Ile Ser Tyr Phe Leu Ile Leu Tyr Ile Phe
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Arg Gly Lys Thr Leu Pro Thr Gly Asp Arg Ile Met Leu Met Leu Ser

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 Ser Leu Leu Phe Arg Ile Val Tyr Asn Gln Asn Ser Val Tyr Ile Leu
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 Phe Lys Val Ile Thr Val Phe Leu Asn His Ser Asn Leu Trp Phe Ala
 100 105 110
 Ala Trp Leu Lys Val Phe Tyr Cys Leu Arg Ile Ala Asn Phe Asn His
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 Pro Leu Phe Phe Leu Met Lys Arg Lys Ile Ile Val Leu Met Pro Trp
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 Leu Leu Arg Leu Ser Val Leu Val Ser Leu Ser Phe Ser Phe Pro Leu
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 Ser Arg Asp Val Phe Asn Val Tyr Val Asn Ser Ser Ile Pro Ile Pro
 165 170 175
 Ser Ser Asn Ser Thr Glu Lys Lys Tyr Phe Ser Glu Thr Asn Met Val
 180 185 190
 Asn Leu Val Phe Phe Tyr Asn Met Gly Ile Phe Val Pro Leu Ile Met
 195 200 205
 Phe Ile Leu Ala Ala Thr Leu Leu Ile Leu Ser Leu Lys Arg His Thr
 210 215 220
 Leu His Met Gly Ser Asn Ala Thr Gly Ser Arg Asp Pro Ser Met Lys
 225 230 235 240
 Ala His Ile Gly Ala Ile Lys Ala Thr Ser Tyr Phe Leu Ile Leu Tyr
 245 250 255
 Ile Phe Asn Ala Ile Ala Leu Phe Leu Ser Thr Ser Asn Ile Phe Asp
 260 265 270
 Thr Tyr Ser Ser Trp Asn Ile Leu Cys Lys Ile Ile Met Ala Ala Tyr
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 Pro Ala Gly His Ser Val Gln Leu Ile Leu Gly Asn Pro Gly Leu Arg
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 Arg Thr Thr Ala Tyr Asn Ile Trp Ala Val Ile Asn His Phe Ser Asn
 85 90 95
 Trp Leu Ala Thr Thr Leu Ser Ile Phe Tyr Leu Leu Lys Ile Ala Asn
 100 105 110
 Phe Ser Asn Phe Ile Phe Leu His Leu Lys Arg Arg Val Lys Ser Val
 115 120 125
 Ile Leu Val Met Leu Leu Gly Pro Leu Leu Phe Leu Ala Cys His Leu
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 Phe Val Ile Asn Met Asn Glu Ile Val Arg Thr Lys Glu Phe Glu Gly
 145 150 155 160
 Asn Met Thr Trp Lys Ile Lys Leu Lys Ser Ala Met Tyr Phe Ser Asn
 165 170 175
 Met Thr Val Thr Met Val Ala Asn Leu Val Pro Phe Thr Leu Thr Leu
 180 185 190
 Leu Ser Phe Met Leu Leu Ile Cys Ser Leu Cys Lys His Leu Lys Lys
 195 200 205
 Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Thr Lys Val His
 210 215 220

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Ile Lys Ala Leu Gln Thr Val Ile Ser Phe Leu Leu Leu Cys Ala Ile
 225 230 235 240

Tyr Phe Leu Ser Ile Met Ile Ser Val Trp Ser Phe Gly Ser Leu Glu
 245 250 255

Asn Lys Pro Val Phe Met Phe Cys Lys Ala Ile Arg Phe Ser Tyr Pro
 260 265 270

Ser Ile His Pro Phe Ile Leu Ile Trp Gly Asn Lys Lys Leu Lys Gln
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Ala Ala Leu Ala Val Ser Arg Val Gly Leu Leu Trp Val Ile Leu Leu
 50 55 60

His Trp Tyr Ser Thr Val Leu Asn Pro Thr Ser Ser Asn Leu Lys Val
 65 70 75 80

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Ile Ile Phe Ile Ser₈₅ Asn Ala Trp Ala Val₉₀ Thr Asn His Phe Ser₉₅ Ile
 Trp Leu Ala Thr₁₀₀ Ser Leu Ser Ile Phe Tyr Leu Leu Lys Ile₁₁₀ Val Asn
 Phe Ser Arg₁₁₅ Leu Ile Phe His₁₂₀ Leu Lys Arg Lys Ala₁₂₅ Lys Ser Val
 Val₁₃₀ Leu Val Ile Val Leu Gly₁₃₅ Ser Leu Phe Phe₁₄₀ Leu Val Cys His Leu
 Val₁₄₅ Met Lys His Thr₁₅₀ Tyr Ile Asn Val Trp Thr₁₅₅ Glu Glu Cys Glu Gly₁₆₀
 Asn Val Thr Trp₁₆₅ Lys Ile Lys Leu Arg Asn₁₇₀ Ala Met His Leu Ser₁₇₅ Asn
 Leu Thr Val₁₈₀ Ala Met Leu Ala Asn Leu₁₈₅ Ile Pro Phe Thr Leu₁₉₀ Thr Leu
 Ile Ser Phe Leu Leu Leu Ile Tyr₂₀₀ Ser Leu Cys Lys His₂₀₅ Leu Lys Lys
 Met Gln Leu His Gly Lys₂₁₅ Gly Ser Gln Asp Pro Ser₂₂₀ Thr Lys Ile His
 Ile₂₂₅ Lys Ala Leu Gln Thr₂₃₀ Val Thr Ser Phe Leu₂₃₅ Ile Leu Leu Ala Ile₂₄₀
 Tyr Phe Leu Cys₂₄₅ Leu Ile Ile Ser Phe Trp₂₅₀ Asn Phe Lys Met Arg₂₅₅ Pro
 Lys Glu Ile Val₂₆₀ Leu Met Leu Cys Gln₂₆₅ Ala Phe Gly Ile Ile₂₇₀ Tyr Pro
 Ser Phe His₂₇₅ Ser Phe Ile Leu Ile₂₈₀ Trp Gly Asn Lys Thr₂₈₅ Leu Lys Gln
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 Arg Thr Thr Ala Tyr Asn Val Trp Ala Val Thr Gly His Phe Ser Asn
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 Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Thr Lys Val His
 210 215 220
 Ile Lys Ala Leu Gln Thr Val Ile Phe Phe Leu Leu Leu Cys Ala Val
 225 230 235 240
 Tyr Phe Leu Ser Ile Met Ile Ser Val Trp Ser Phe Gly Ser Leu Glu
 245 250 255
 Asn Lys Pro Val Phe Met Phe Cys Lys Ala Ile Arg Phe Ser Tyr Pro
 Page 9

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<400> 14
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  20          25          30
Ile Asp Trp Val Asn Thr Arg Lys Ile Ser Ser Ala Glu Gln Ile Leu
  35          40          45
Thr Ala Leu Val Val Ser Arg Ile Gly Leu Leu Trp Val Met Leu Phe
  50          55          60
Leu Trp Tyr Ala Thr Val Phe Asn Ser Ala Leu Tyr Gly Leu Glu Val
  65          70          75          80
Arg Ile Val Ala Ser Asn Ala Trp Ala Val Thr Asn His Phe Ser Met
  85          90          95
Trp Leu Ala Ala Ser Leu Ser Ile Phe Cys Leu Leu Lys Ile Ala Asn
  100          105          110
Phe Ser Asn Leu Ile Ser Leu His Leu Lys Lys Arg Ile Lys Ser Val
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<400> 16

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 Ile Asp Trp Val Lys Arg Lys Lys Ile Ser Ser Ala Asp Gln Ile Leu
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 Thr Ala Leu Ala Val Ser Arg Ile Gly Leu Leu Trp Ala Leu Leu Leu
 50 55 60
 Asn Trp Tyr Leu Thr Val Leu Asn Pro Ala Phe Tyr Ser Val Glu Leu
 65 70 75 80
 Arg Ile Thr Ser Tyr Asn Ala Trp Val Val Thr Asn His Phe Ser Met
 85 90 95
 Trp Leu Ala Ala Asn Leu Ser Ile Phe Tyr Leu Leu Lys Ile Ala Asn
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 Leu Val Ala Asn Met Asp Glu Ser Met Trp Ala Glu Glu Tyr Glu Gly
 145 150 155 160
 Asn Met Thr Gly Lys Met Lys Leu Arg Asn Thr Val His Leu Ser Tyr
 165 170 175
 Leu Thr Val Thr Thr Leu Trp Ser Phe Ile Pro Phe Thr Leu Ser Leu
 180 185 190
 Ile Ser Phe Leu Met Leu Ile Cys Ser Leu Cys Lys His Leu Lys Lys
 195 200 205
 Met Gln Leu His Gly Glu Gly Ser Gln Asp Leu Ser Thr Lys Val His
 210 215 220
 Ile Lys Ala Leu Gln Thr Leu Ile Ser Phe Leu Leu Leu Cys Ala Ile
 225 230 235 240
 Phe Phe Leu Phe Leu Ile Val Ser Val Trp Ser Pro Arg Arg Leu Arg
 245 250 255
 Asn Asp Pro Val Val Met Val Ser Lys Ala Val Gly Asn Ile Tyr Leu
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<211> 924

<212> DNA

<213> Homo sapiens

<400> 17

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<213> Homo sapiens

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          20           25           30
Arg Glu Trp Leu Arg Tyr Gly Arg Leu Leu Pro Leu Asp Met Ile Leu
          35           40           45
Ile Ser Leu Gly Ala Ser Arg Phe Cys Leu Gln Leu Val Gly Thr Val
          50           55           60
His Asn Phe Tyr Tyr Ser Ala Gln Lys Val Glu Tyr Ser Gly Gly Leu
          65           70           75           80
Gly Arg Gln Phe Phe His Leu His Trp His Phe Leu Asn Ser Ala Thr
          85           90           95
Phe Trp Phe Cys Ser Trp Leu Ser Val Leu Phe Cys Val Lys Ile Ala
          100          105          110
Asn Ile Thr His Ser Thr Phe Leu Trp Leu Lys Trp Arg Phe Pro Gly
          115          120          125
Trp Val Pro Trp Leu Leu Leu Gly Ser Val Leu Ile Ser Phe Ile Ile
          130          135          140
Thr Leu Leu Phe Phe Trp Val Asn Tyr Pro Val Tyr Gln Glu Phe Leu
          145          150          155          160
Ile Arg Lys Phe Ser Gly Asn Met Thr Tyr Lys Trp Asn Thr Arg Ile
          165          170          175
Glu Thr Tyr Tyr Phe Pro Ser Leu Lys Leu Val Ile Trp Ser Ile Pro
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Phe Ser Val Phe Leu Val Ser Ile Met Leu Leu Ile Asn Ser Leu Arg
 195 200 205

Arg His Thr Gln Arg Met Gln His Asn Gly His Ser Leu Gln Asp Pro
 210 215 220

Ser Thr Gln Ala His Thr Arg Ala Leu Lys Ser Leu Ile Ser Phe Leu
 225 230 235 240

Ile Leu Tyr Ala Leu Ser Phe Leu Ser Leu Ile Ile Asp Ala Ala Lys
 245 250 255

Phe Ile Ser Met Gln Asn Asp Phe Tyr Trp Pro Trp Gln Ile Ala Val
 260 265 270

Tyr Leu Cys Ile Ser Val His Pro Phe Ile Leu Ile Phe Ser Asn Leu
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Trp Val Ala
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 20 25 30

Ile Glu Trp Phe Lys Arg Gln Lys Ile Ser Phe Ala Asp Gln Ile Leu
 35 40 45

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Thr Ala Leu Ala Val Ser Arg Val Gly Leu Leu Trp Val Leu Val Leu
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 65 70 75 80
 Arg Ile Thr Ala Tyr Asn Val Trp Ala Val Ile Asn His Phe Ser Asn
 85 90 95
 Trp Leu Ala Thr Ser Leu Ser Ile Phe Tyr Leu Leu Lys Ile Ala Asn
 100 105 110
 Phe Ser Asn Leu Ile Phe Leu His Leu Lys Arg Arg Val Lys Ser Val
 115 120 125
 Val Leu Val Ile Leu Leu Gly Pro Leu Leu Phe Leu Val Cys His Leu
 130 135 140
 Phe Val Ile Asn Met Asn Gln Ile Ile Trp Thr Lys Glu Tyr Glu Gly
 145 150 155 160
 Asn Met Thr Trp Lys Ile Lys Leu Arg Ser Ala Met Tyr Leu Ser Asn
 165 170 175
 Thr Thr Val Thr Ile Leu Ala Asn Leu Val Pro Phe Thr Leu Thr Leu
 180 185 190
 Ile Ser Phe Leu Leu Leu Ile Cys Ser Leu Cys Lys His Leu Lys Lys
 195 200 205
 Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Met Lys Val His
 210 215 220
 Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu Leu Leu Cys Ala Ile
 225 230 235 240
 Tyr Phe Leu Ser Ile Ile Met Ser Val Trp Ser Phe Glu Ser Leu Glu
 245 250 255
 Asn Lys Pro Val Phe Met Phe Cys Glu Ala Ile Ala Phe Ser Tyr Pro
 260 265 270
 Ser Thr His Pro Phe Ile Leu Ile Trp Gly Asn Lys Lys Leu Lys Gln
 275 280 285
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279152RX

<212> PRT
<213> Mus sp.

<400> 24

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Cys Tyr Asp Leu Phe Lys Ser Arg Thr Phe Leu Ile Leu Gln Thr Leu
          35          40          45
Leu Met Cys Thr Gly Leu Ser Arg Leu Gly Leu Gln Ile Met Leu Met
          50          55          60
Thr Gln Ser Phe Phe Ser Val Phe Phe Pro Tyr Ser Tyr Glu Glu Asn
 65          70          75          80
Ile Tyr Ser Ser Asp Ile Met Phe Val Trp Met Phe Phe Ser Ser Ile
          85          90          95
Gly Leu Trp Phe Ala Thr Cys Leu Ser Val Phe Tyr Cys Leu Lys Ile
          100          105          110
Ser Gly Phe Thr Pro Pro Trp Phe Leu Trp Leu Lys Phe Arg Ile Ser
          115          120          125
Lys Leu Ile Phe Trp Leu Leu Leu Gly Ser Leu Leu Ala Ser Leu Gly
          130          135          140
Thr Ala Thr Val Cys Ile Glu Val Gly Phe Pro Leu Ile Glu Asp Gly
          145          150          155          160
Tyr Val Leu Arg Asn Ala Gly Leu Asn Asp Ser Asn Ala Lys Leu Val
          165          170          175
Arg Asn Asn Asp Leu Leu Leu Ile Asn Leu Ile Leu Leu Leu Pro Leu
          180          185          190
Ser Val Phe Val Met Cys Thr Ser Met Leu Phe Val Ser Leu Tyr Lys
          195          200          205
His Met His Trp Met Gln Ser Glu Ser His Lys Leu Ser Ser Ala Arg
          210          215          220
Thr Glu Ala His Ile Asn Ala Leu Lys Thr Val Thr Thr Phe Phe Cys
          225          230          235          240
Phe Phe Val Ser Tyr Phe Ala Ala Phe Met Ala Asn Met Thr Phe Arg
          245          250          255
Ile Pro Tyr Arg Ser His Gln Phe Phe Val Val Lys Glu Ile Met Ala
          260          265          270
Ala Tyr Pro Ala Gly His Ser Val Ile Ile Val Leu Ser Asn Ser Lys
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Phe Lys Asp Leu Phe Arg Arg Met Ile Cys Leu Gln Lys Glu Glu
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279152RX

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<223> Ile, Val or Leu

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<223> Val or Leu

<220>
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<223> Ile or Val

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Cys Xaa Asp Trp
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279152RX

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<223> Thr or Ile

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<223> Ser, Thr or Asn

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<223> Leu, Ile or Val

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<220>
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<210> 28
 <211> 18
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 <213> Artificial Sequence

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279152RX

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Leu Lys

<210> 29

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Ile, Phe or Val

<220>

<221> MOD_RES

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<223> Lys or Arg

<220>

<221> MOD_RES

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<223> Ser or Thr

<220>

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<223> Lys or Arg

<220>

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<223> Gln or Lys

<220>

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<223> Met or Ile

<220>

<221> MOD_RES

<222> (14)

<223> Gln or Lys

<220>

<223> Description of Artificial Sequence: Consensus
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<210> 30

<211> 14

279152RX

<212> PRT
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<212> PRT
<213> Artificial Sequence

<220>
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